Idaho Department of Health and Welfare

Idaho Disease

BULLETIN

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Critical Changes To The Idaho Newborn Screening Program Begin July 1, 2002

The Idaho Newborn Screening Program has undergone some changes this year that will impact the provider community. Three important changes are described below.

1. Fees: The Newborn Screening Program has maintained a testing relationship with the Oregon Public Health Laboratory since 1975 and this will continue. However, due to fiscal constraints that the State of Idaho is facing, the State Newborn Screening Program will now charge a fee for newborn screening. The newborn screening test kits, which will be available beginning June 1, 2002, must now be ordered directly from Christina Giso with the State Newborn Screening Program (208-334-4927). There is no minimum or maximum order; however, all orders must be prepaid. Hospitals and birthing centers can order two-part test kits for $36 while physicians and other healthcare providers attending births can order one-part test kits for $18. Physicians, hospitals and birthing centers who have recently conducted newborn screening in Idaho have already been notified of this change and have been provided order forms for kits.

2. Reporting: New rules have formally been established to require screening for a minimum of five specific conditions detectable in the newborn; according to the Idaho Department of Health and Welfare Rules and Regulations Governing Newborn Screening. Any positive results are now reportable under the Idaho Department of Health and Welfare Rules and Regulations Governing Reportable Diseases. They are:

- biotinidase deficiency
- congenital hypothyroidism
- galactosemia
- maple syrup urine disease
- phenylketonuria

Idaho infants have been screened for all of these conditions since 1975; however, this marks the first time all five conditions are formally named through state regulation.

3. Laboratory Testing: Newborn screening samples (dried blood spot samples) from infants born in Idaho are sent to the Oregon Public Health Laboratory for analysis. They utilize the Tandem Mass Spectrometry (MS/MS) technology to determine the presence and level of acylcarnitines associated with certain metabolic disorders.

Inside:

The MS/MS technology has recently been implemented and replaces the older Guthrie test. The MS/MS testing substantially decreases the turnaround time for each test. MS/MS allows for the identification of upwards of 20 conditions from one blood spot at no additional cost. Some of the additional conditions identifiable using MS/MS include amino acidemias, organic acidurias and fatty acid oxidation disorders. Galactosemia, congenital hypothyroidism and biotinidase deficiency are evaluated using separate testing methods.

Testing Time Frame:

The time frame and the procedure for sample collection have not changed. The time frame is as follows:

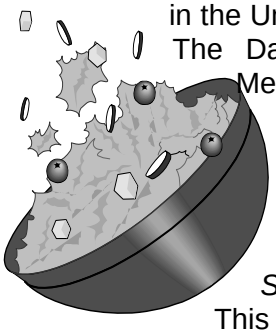
- *Normal birth, non-premature infant:* Tested between 48 hours and 5 days of age.
- *Premature infant:* Tested between 48 hours and 10 days of age.
- *Note:* Infants should be tested prior to transfusion or placement on dialysis. (Note: Infants tested after a transfusion should be re-tested 3 months after the date of transfusion.)

All infants must have a newborn screening sample taken before discharge from the hospital or birthing center regardless of the age of the infant. Infants tested prior to 48 hours of age need to be re-tested between 5 and 15 days of age.

The Oregon Public Health Laboratory will continue to provide the same level of service to Idaho. This includes laboratory screening, diagnostic testing, basic follow-up for the Idaho state coordinator, and medical consultation from Oregon Health Sciences University. Medical consultants are specialists in pediatric endocrinology and metabolic genetics. If needed, consultants are available for hemo-globinopathies.

Contact Christina Giso in the Newborn Screening Program at 208 – 334-4927 with any questions.

Foodborne Bioterrorism



The largest act of food related bioterrorism in the United States happened in The Dalles, Oregon in 1984. Members of a sect, under the guidance of their spiritual leader the Bhagwan Shree Rajneesh, adulterated 10 salad bars with *Salmonella* Typhimurium. This led to 751 documented illnesses with at least 45 hospitalizations. The attack was a politically motivated act of domestic bioterrorism meant to alter the outcome of a local election. Thankfully, nobody died from this deliberate contamination of retail food; however, it was a wake-up call to the public health community to be increasingly vigilant regarding intentional food-borne disease outbreaks.

Physicians play a key role in identifying illness that might be associated with a contaminated food item. If you suspect a food vehicle as the source of your patient's illness, reporting, even in the absence of an etiologic agent, is critical for rapid surveillance and response. Foodborne illness is reportable as described in the Idaho Rules and Regulations Governing Reportable Diseases. You may see one person with a suspicious illness and another physician may see a few more. Reporting these events allows epidemiologists to connect the dots. The district health department will interview the patient and carry out a thorough food-history, work with the exposed persons to determine the most-likely-source of infection, and explore contamination issues by visiting the implicated establishment, provide food safety tips to persons contaminating their food at home, or work with FDA or USDA in

a trace-back effort. Reporting can be done by contacting your district health department or accessing the recorded 24/7 reporting WATTS line at the state Office of Epidemiology. Should you suspect foul play or an act of bioterrorism and require **immediate assistance**, please have the public health on-call staff person paged by calling the State Communications Hotline at 1-800-632-8000 or 846-7610.

The opportunity for an act of foodborne bioterrorism to succeed may be as close as your grocery store, restaurant, or dairy. In light of heightened safety and security issues since September 11, 2001 public health officials will be working more closely with representatives of the food industry to assess high-risk situations from the farm to the table. Efforts to identify and reduce or eliminate opportunities for acts of food-borne bioterrorism at points of harvesting, processing, preparation, and sale to the public will be undertaken.

HOW TO GET BETTER RESULTS FROM YOUR MICROBIOLOGY LABORATORY

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Good communication between the clinician and the microbiology laboratory can improve results and laboratory safety. Here's how:

Better Results:
The best way to assure that the microbiology laboratory is looking for the most likely pathogen in a clinical sample is to provide thorough information to the laboratorian upon sample submission. If communication is inadequate, suspected but fastidious pathogens may be outright missed or identification delayed since they require special techniques. For example, the detection of brucellosis may require that blood cultures be held for a longer than usual length of time. Tularemia will not be sought and will almost certainly be missed if the laboratory is not alerted. Similarly, explicit communication of the source of the specimen will help guide the microbiologists to inoculate the proper media.

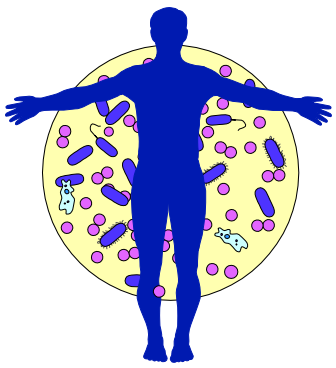
Safety:
Communication of the suspected pathogen increases safety for the microbiology personnel. Certain pathogens are very communicable in culture and require special handling within safety cabinets. Examples include brucellosis, meningococcal disease, coccidiomycosis, tularemia and plague. If the technologist is aware that a dangerous pathogen is suspected, he or she can take the appropriate precautions. For instance, *Yersinia pestis* (plague) appears much like routine enteric bacteria in culture. Unless the laboratory is alerted, the culture will likely be handled on an open bench rather than in a safety cabinet.

These two steps will assist you and your laboratory:

- Provide a detailed description of the sample source on the submission slip (ex: "wound" is too vague, "Abdominal wound, deep" is preferred).

- Also on the submission slip, when possible, include suspected path-ogens, a brief clinical description, and tests requested.

<u>(This does NOT imply that the laboratory will not look for other pathogens; it merely gives them a logical starting point).</u>



Flu season winds down

Physician visits due to influenza-like illness Idaho Disease Bulletin

have dropped to below the epidemic threshold nationwide. Influenza A is no longer being detected by the State Public Health Laboratory, but several small outbreaks of influenza B of the Victoria lineage have been detected in schools in recent weeks. Influenza B viruses currently circulating worldwide can be divided into 2 antigenically distinct lineages, B/Yamagata/16/88 and B/Victoria/2/87. Viruses of the B/Yamagata lineage have circulated widely since 1990. The B component of the current influenza vaccine belongs to the B/Yamagata lineage. Viruses of the B/Victoria lineage had not been identified outside of Asia between 1991 and March 2001.

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